

ABSTRACT

The present invention is a user equipment (UE), including a receiver and method for receiving one of a plurality of channels in a communication signal. An adaptive matched filter produces a filtered signal by using a weighting signal. A rake receiver produces a filter weighting signal using a pseudo-noise signal generator. A channel despreader despreads the filtered signal using the pseudo-noise signal generated to produce a despread channel signal of the selected channel. A pilot channel despreader despreads the filtered signal using a pseudo-noise signal generator to produce a despread pilot signal of the pilot channel. A hard decision processor receives the despread channel signal of the selected channel and produces a correction signal. A phase-locked loop utilizes at least the despread pilot signal and produces a phase correction signal which is applied to produce phase-corrected channel signals.